EX PARTE OR LATE FILED

ORIGINAL

GURMAN, KURTIS, BLASK & FREEDMAN

CHARTERED

SUITE 500
1400 SIXTEENTH STREET, N.W.
WASHINGTON, D.C. 20036

(202) 328-8200
TELECOPIER: (202) 462-1784

DOCKET FILE COPY ORIGINAL

RECEIVED

JAN 17 1995

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

January 17, 1995

William F. Caton, Acting Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Ex Parte Submission
PR Docket No. 93-61

Dear Mr. Caton:

On behalf of Southwestern Bell Mobile Systems, Inc. ("SBMS"), this ex parte communication responds to several analogous submissions recently introduced into the record of this proceeding.*/

In addition, SBMS is compelled to respond, albeit briefly, to a January 9, 1995 ex parte filing by AirTouch Teletrac ("Teletrac"), whose existence SBMS fortuitously discovered on January 12, 1995 by reviewing documents recently received by the Commission in this proceeding. (As of January 13, 1995, no public notice disclosing Teletrac's January 9 filing had been released by the Commission.) Although the January 9 filing is devoted almost entirely to belittling the Quiktrak technology employed by SBMS, Teletrac elected not to serve SBMS with a copy of its filing-- an omission whose seriousness is compounded by the imminence of Commission action in this proceeding. Equally unfortunate, critical allegations in Teletrac's filing are factually inconsistent, as SBMS will show in a detailed response it will submit to the Commission in one (or two) days.

SBMS's position on the critical issues discussed in the recent letters (excluding Teletrac's)-- namely, band plan and licensing scheme, grandfathering and transition rules, interconnected voice and data service, time sharing, and co-existence with Part 15

---

*/ Specifically, SBMS is responding to written ex parte presentations filed by or on behalf of: MobileVision, L.P. (December 14, 20, 22 and January 10, 1994); Metricom and Pinpoint Communications, Inc. (December 29, 1994); Uniplex Corporation (December 30, 1994); and Amtech Corporation (January 4, 1994).

No. of Copies rec'd 0+4
List A B C D E

users-- are briefly summarized below. An enclosed Addendum presents SBMS's rationale for each of the following positions.

- Band Plan/Licensing-- SBMS still contends that reverse link spectrum should be auctioned in compact increments (2 MHz is probably optimal); nevertheless, to expedite this proceeding's conclusion, SBMS will accept the Commission's suggested band proposal characterized by a 5.75 MHz sub-band (at 904 - 909.75 MHz), a 5.5 MHz sub-band (921.75 - 927.25 MHz), a two MHz sub-band (919.75 - 921.75 MHz), and three 250 KHz narrowband channels in the 927.25 - 928.00 MHz sub-band.**/ By contrast, the new frequency plan presented in Figure 2 of the "Comments" attached to MobileVision's ex parte filing dated December 22, 1994 is unworkable and should be rejected.

- Grandfathering/Transition-- Licensees who have failed to complete construction upon release of this docket's Report and Order should be entitled to no grandfather rights, their outstanding extended implementation schedules should be cancelled, and no additional time in which to complete construction should be provided to them; licensees who have completed construction by the release date may retain their spectrum (without further system expansion or modification***/) until the later of either 15 months from the release date, or the date upon which the auction winner notifies the Commission that it is commencing commercial service. Licensees who completed construction and commenced commercial public service by September 30, 1994 will be afforded thirty (30) months to vacate their interim spectrum (without expansion or modification***/).

- Voice/Data Services-- Wideband AVM and LMS are non-voice services; any voice service on AVM/LMS spectrum must be strictly limited to communications between remote objects and emergency response bureaus, and should not be interconnected with the PSTN.

**/ SBMS's understanding of this plan differs from MobileVision's, which (in "Comments" attached to its ex parte filing dated December 22, 1994) positioned the lowest sub-band at 904.5 to 910 MHz.

***/ This ban would leave open the opportunity to make necessary corrections to previously authorized sites concerning ground elevation, antenna heights, position and the like.

- Time Sharing-- Pinpoint's time-sharing plan, as repeatedly demonstrated in the record of this proceeding, will not work and should be rejected.

- Part 15/AVM Co-Existence-- Part 15 users should be allowed to continue to operate throughout the 902 - 928 MHz band. In those band segments where AVM/LMS is prohibited, Part 15 will be senior in the hierarchy relative to AVM/LMS. In band segments where AVM/LMS is permitted, Part 15 should operate, without new restrictions or regulations, on a secondary basis to AVM/LMS.

An original and one copy of this ex parte presentation are being filed in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Very truly yours,

Louis Gurman
Jerome K. Blask

Counsel for Southwestern Bell
Mobile Systems, Inc.

Addendum

cc (w/Addendum): Certificate of Service

ADDENDUM

Rationale For Positions Of Southwestern Bell Mobile Systems, Inc. Regarding Key Issues in PR Docket 93-61

1. Band Plan and Licensing Scheme

In previous submissions, SBMS has advocated distributing wideband AVM licenses on the basis of an auction plan characterized by relatively small increments of spectrum (2 MHz is probably optimal) offered separately, with free alienability of the resulting authorization.[1/] In terms of economic and spectral efficiency, this approach remains unsurpassed and is clearly preferred by SBMS. To expedite this proceeding, however, SBMS will accept the allocation suggested by the Commission, which has the four following elements: (a) a 5.75 MHz sub-band, at 904 to 909.75 MHz; (b) a two MHz sub-band, at 919.75 to 921.75 MHz; (c) a 5.5 MHz sub-band, at 921.75 to 927.25 MHz; and (d) three 250 KHz channels, at 927.25 to 928.00 MHz.

The "Comments" attached to MobileVision's ex parte filing dated December 22, 1994 claim that Teletrac's existing forward link completely blocks the 921.75 to 927.25 MHz sub-band proposed in the Commission plan. As a result, MobileVision has proposed earmarking 919.75 to 925.25 MHz as the second 5.5 MHz block and 925.25 to 927.25 as the two MHz block, as depicted in Figure 2 of its Comments.[2/] MobileVision emphatically supports this new version of the Commission plan, which it claims "results in all bands being useable . . ."

SBMS flatly disputes this claim.[3/] MobileVision's new version of the Commission plan prohibits 925.25 to 927.25 MHz from serving as a separate, independent sub-band by depriving its operator of any separation between his or her wideband and

---

1/ See Ex Parte Comments Of Southwestern Bell Mobile Systems, Inc. in PR Docket No. 93-61, filed November 9, 1994 (hereinafter "SBMS Ex Parte Comments") at 3-13.

2/ In its Comments (at Figure 1), MobileVision appears to have incorrectly placed the first sub-band under the Commission's plan at 904.5 to 910 MHz (as opposed to 904 to 909.75 MHz), and thereby reduces that band by 250 KHz.

3/ SBMS also disputes MobileVision's assertion in the Comments that its new version of the Commission's plan ". . . is still acceptable to those companies that rightly developed systems within the constraints of the Interim Rules." Having successfully developed systems that conform to the interim rules, SBMS unambiguously rejects MobileVision's new proposal.

narrowband links.[4/] To provide reliable service, the two MHz licensee will be compelled to merge with his counterpart in the adjacent 5.5 MHz block, transforming a market structure originally characterized by three rival service providers to one with only two. MobileVision's new proposal should also be rejected because:

- it relegates the two MHz licensee to the band segment where background noise from high-powered paging signals in the bands above 928 MHz is most severe; and

- the technical rationale for MobileVision's new plan, that Teletrac's existing narrowband signal will block the 921.75 to 927.25 MHz sub-band, is utterly bogus; Teletrac's existing narrowband signal was allocated under the interim rules; Teletrac, like all AVM/LMS operators, must migrate to the 250 KHz band between 927.25 and 928 MHz thereby eliminating the problem that MobileVision purports to solve with its new plan.

2. Grandfathering and Transition Rules

SBMS's position on grandfathering and transition has the following components:

(a) licensees (including SBMS) whose base transmitters remain unconstructed on the release date of the Report and Order in this proceeding are accorded no grandfather rights; all extended implementation schedules associated with those licenses are terminated and no additional time in which to complete construction is provided by the Commission;

(b) licensees of systems whose base transmitters were constructed as of the Report and Order's release date but were not providing commercial public service by September 30, 1994 (SBMS' wide area system in Chicago would fall into this category) may retain their interim spectrum

---

4/ SBMS (and Teletrac) have consistently urged maximum separation between wideband return links and narrowband forward links; under SBMS's Chicago license, for example, 14 MHz of contiguous spectrum separates these links. The new plan espoused in MobileVision's Comments, however, compresses this protective bandwidth to between zero and 0.5 MHz. For this reason, MobileVision's new proposal specifically burdens SBMS (and Teletrac) without any adverse effect on MobileVision, which has professed indifference to spectral separation of the wideband and narrowband portions of its allocation.

(without further system expansion or modification[5/]) until the later of either 15 months from the release date, or the date upon which the auction winner (for the same spectrum) notifies the Commission that it is ready to commence commercial service;[6/] if, like any other applicant, these licensees prevail at the auction, they will be able to transition to the new band plan adopted in this proceeding; and

(c) licensees who completed construction and commenced commercial public service by September 30, 1994 will be afforded thirty (30) months to vacate their interim spectrum (without further system expansion or modification[7/]); if, like any other applicant, these licensees prevail at the auction, they will be able to transition to the new band plan.[8/]

The ban on grandfathering licensees whose interim systems are unconstructed, as proposed above, has numerous policy and practical benefits. Absent this ban, widespread grandfathering will frustrate any auction system ultimately implemented for AVM/LMS, and will prevent that system from realizing its principal objective-- assigning the license to the applicant who values it the most. Absent a ban, the existence of numerous grandfathered systems will discourage competitive bidding, thereby reducing the fair market value of AVM/LMS spectrum. Grandfathering incumbents with naked licenses will establish wideband AVM/LMS as a monopoly or duopoly service in most major markets, rather than the competitive service envisioned by the Commission.[9/] Finally, even if the grandfather period in the case of currently unbuilt licenses is limited to one year or less, the Commission will create a perverse incentive to build skeletal systems. While such systems are likely to be inadequate to serve the public's needs, they will

---

5/ This ban would leave open the opportunity to make necessary corrections to previously authorized sites concerning ground elevation, antenna heights, position and the like.

6/ See SBMS Ex Parte Comments, at 13-14.

7/ See n. 5.

8/ SBMS will interpose no objection to a bid credit for these interim incumbents who have both completed construction and commenced commercial public service (by September 30, 1994), provided the Commission has the requisite statutory authority to adopt such a preference for AVM/LMS.

9/ SBMS Ex Parte Comments at 24-26.

become impediments to auction winners. Clearly such a licensing regime does not serve the public interest.

The prohibition on grandfathering advocated here by SBMS is consistent with:

- the Commission's legal authority under the Act to modify licenses;[10/]
- the instant Notice of Proposed Rulemaking's admonition concerning AVM frequencies "appear[ing] more congested than they really are because of licensees that do not construct . . . ;"[11/]
- the express conditions imposed on all interim wideband authorizations and on all grants of extended implementation schedules since the NPRM's release;[12/] and
- the claim in the Report and Order which promulgated the interim rules that such rules were indeed "interim" or temporary, as were any authorizations issued pursuant thereto;[13/]

3. Interconnected Voice and Data Service

There is no basis in Commission policy or precedent for allowing AVM/LMS spectrum to be used for the type of voice and data services advocated by certain parties, particularly MobileVision. The record of this rulemaking and its predecessor is devoid of any evidence that the Commission ever envisioned AVM/LMS as an analog of conventional mobile telephone, cellular, SMR or enhanced SMR, narrowband or broadband PCS, or enhanced mobile satellite service. Indeed, this long list of existing or imminent wireless voice services underscores the fallacy of attempting to force this capability on AVM/LMS.

Both the interim rules adopted in 1974 and the NPRM define AVM/LMS as a non-voice service. The NPRM, for example,

---

10/ Id. at 14-19.

11/ Id. at 17-18, citing Notice of Proposed Rulemaking in PR Docket No. 93-61, 8 FCC Rcd 2502, 2507 (1993) (hereinafter "NPRM").

12/ Id. at 19 - 21 (and citations therein).

13/ Id. at 21-22, n. 34, citing Report and Order in Docket No. 18302 (Car Locator Systems), 30 Rad. Reg. 2d (P&F) 1665, 1672 (1974).

describes LMS as the use of non-voice signalling methods from and to radio units to make known the location of such units. LMS systems may also transmit and receive status and instructional messages related to the units involved.[14/]

SBMS believes this definition properly conveys the true character of AVM/LMS, and reflects no intention or inclination by the Commission to alter that character. Moreover, as the Commission is probably aware, any move to transform AVM/LMS into another type of wireless voice or data service will severely deflate the market value of PCS spectrum and deter competitive bidding therefor.

For these reasons, any use of AVM/LMS spectrum for wireless voice (and data unrelated to location) should be strictly limited to communications between a remote radio unit and emergency response bureaus, and nothing more. Similarly, the Commission must reject any attempt to allow AVM/LMS spectrum to be used for interconnected voice and data service, which will hasten the transformation of AVM/LMS into an alternate cellular, ESMR, PCS or similar service, with all that implies in terms of frequency congestion and bottlenecks.

4. Time Sharing

SBMS disputes essentially all the contentions set forth in the ex parte presentation on behalf of Pinpoint Communications, Inc. ("Pinpoint") dated December 29, 1994. Pinpoint appears to castigate SBMS for rejecting the prospect of time-sharing spectrum with Pinpoint's TDMA system. At the same time, Pinpoint casually ignores fundamental differences between its technology and the Quiktrak system deployed by SBMS.

Pinpoint seeks to remove from the Commission's proposed plan two usable AVM/LMS sub-bands (919.75-921.75 and 921.75-927.25 MHz) and their corresponding narrowbands (927.25-927.75 MHz) and replace them with a single "shared" band that only Pinpoint's system could conceivably utilize. This will effectively expel from this industry two of three AVM/LMS operators with deployed systems (albeit, in MobileVision's case, the systems in question are

---

14/ NPRM, 8 FCC Rcd at 2502-03 (emphasis added). Section 90.7 of the Rules, which was adopted in 1974, defines AVM as "[t]he use of non-voice signalling methods to make known at fixed points the location of the vehicles." 47 C.F.R. §90.7 (emphasis added).

skeletal). In their place, Pinpoint may operate, assuming its unproven technology can work.[15/]

Pinpoint's criticisms of SBMS and other AVM/LMS operators for not participating in their time-sharing proposal are inappropriate. The fact that Pinpoint's system can support the Time Division Multiple Access (TDMA) method is because the system was specifically designed for this purpose. Pinpoint is proposing a system with very high bandwidth requirements, wideband forward links, and very high mobile output power. Realizing that this will preclude other systems from operating at the same time, Pinpoint developed a TDMA scheme, its only option for sharing. Having cornered itself into one method of sharing spectrum, Pinpoint now attempts to fault others for having developed different techniques for cooperatively using this spectrum.

SBMS's system, merely by virtue of occupying one-fourth the bandwidth of Pinpoint's licensed system and one-eighth the bandwidth of Pinpoint's demonstration system, is, by far, the more benevolent of the two systems. Additionally, SBMS operates at lower power levels than Pinpoint, thereby reducing the noise produced to primary and tertiary users in the band (ISM and federal government location systems, and amateur radio unlicensed devices) and expanding the range of services that can be performed, such as those involving personal AVM/LMS devices.

SBMS and virtually every other participant in this rulemaking have asserted that the future radio environment of the 902-928 MHz band is expected to be characterized by increasing noise. Pinpoint's technology, which it characterizes as a "sharing" system, will accelerate, if not precipitate, the fatal spiral whereby each in-band user raises its signal strength to compensate for other such users raising their signal strength.

Pinpoint also attempts to distort the instant record by "comparing" the Quiktrak 250 millisecond location burst to Pinpoint's 200 microsecond burst and 640 microsecond transaction. They use this misinformation to try to demonstrate that, in an imaginary 0.7 second interval, SBMS will be able to locate only two vehicles. Pinpoint's conclusion is wrong. Quiktrak uses other techniques to increase system capacity by orders of magnitude above the result claimed by Pinpoint without exceeding two MHz bandwidth. As SBMS noted during Commissioner Ness's December 7, 1994 round table meeting, Quiktrak's operating capacity allows nearly one-quarter million locations per hour in just two megahertz bandwidth.

15/ As the Commission knows, Pinpoint has demonstrated technical feasibility on only a single occasion in a tiny geographical area, while occupying twice the bandwidth for which it is licensed and for which it has proposed permanent rules.

Quiktrak's total location capacity in two MHz (i.e., where all wideband channels are assigned exclusively to the location function) is significantly higher.

5. Co-Existence Between Part 15 Users and AVM/LMS

SBMS contends that wideband AVM and Part 15 users can co-exist in the 902-928 MHz band provided they reach consensus on certain core issues. SBMS's recommendation on resolving those issues is set forth below:

- flatly prohibit wideband forward links anywhere in the 902-928 MHz band, while restricting narrowband forward links to 927.250 - 928.000 MHz;

- outside the sub-bands to which AVM/LMS is confined, no height restrictions should be imposed on Part 15 users, provided they comply with all applicable Part 15 rules (including 47 C.F.R. §15.249);

- within the sub-bands to which AVM/LMS is confined under the Commission's suggested plan (see above), Part 15 users may operate, without any new rules or conditions attributable to the advent of AVM/LMS, but on a secondary basis to AVM/LMS;[16/] and

- preclude all wideband, multilateration AVM systems from using the vacant portion of the 902-928 MHz band, e.g., 909.75 to 919.75 MHz in the Commission plan.

16/ Should the Commission consider this too inflexible, SBMS will evaluate a plan similar to that proposed by the Commission in August 1994. That plan was characterized by the following interference criteria: (a) Part 15 transmitters with antennas exceeding five meters AGL are presumed to be interfering; less than five meter antennas are presumed non-interfering; (b) Part 15 directional antennas with gains exceeding 6 dBi are presumed to interfering and must reduce power below one watt; directional antennas with gains below 6 dBi are presumed non-interfering; and (c) Part 15 field disturbance sensors located within the sub-bands of the 902 -928 MHz band are presumed interfering.

CERTIFICATE OF SERVICE

I, Ruth E. McGovern, a secretary with the law firm of Gurman, Kurtis, Blask & Freedman, Chartered, hereby certify that copies of the foregoing "EX PARTE PRESENTATION OF SOUTHWESTERN BELL MOBILE SYSTEMS, INC." were hand delivered, this 17th day of January, 1995, to the following individuals:

Chairman Reed E. Hundt
Federal Communications Commission
1919 M Street, N.W.
Room 814
Washington, D.C. 20554

Commissioner Andrew C. Barrett
Federal Communications Commission
1919 M Street, N.W.
Room 826
Washington, D.C. 20554

Commissioner Rachelle B. Chong
Federal Communications Commission
1919 M Street, N.W.
Room 844
Washington, D.C. 20554

Commissioner Susan Ness
Federal Communications Commission
1919 M Street, N.W.
Room 832
Washington, D.C. 20554

Commissioner James H. Quello
Federal Communications Commission
1919 M Street, N.W.
Room 802
Washington, D.C. 20554

Ruth Milkman
Office of the Chairman
Federal Communications Commission
1919 M Street, N.W.
Room 814
Washington, D.C. 20554

Lauren Belvin
Office of Commissioner James Quello
Federal Communications Commission
1919 M Street, N.W.
Room 802
Washington, D.C. 20554

Rudy Baca
Office of Commissioner James Quello
Federal Communications Commission
1919 M Street, N.W.
Room 802
Washington, D.C. 20554

David R. Siddall
Office of Commissioner Susan Ness
Federal Communications Commission
1919 M Street, N.W.
Room 832
Washington, D.C. 20554

Jane Mago
Office of Commissioner Rachelle B. Chong
Federal Communications Commission
1919 M Street, N.W.
Room 844
Washington, D.C. 20554

Jill M. Luckett
Office of Commissioner James Quello
Federal Communications Commission
1919 M Street, N.W.
Room 802
Washington, D.C. 20554

James R. Coltharp
Office of Commissioner Andrew Barrett
Federal Communications Commission
1919 M Street, N.W.
Room 826
Washington, D.C. 20554

Ralph A. Haller, Deputy Chief
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.
Room 5002
Washington, D.C. 20554

F. Ronald Netro
Engineering Assistant to the Chief
Commercial Radio Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.
Room 5002
Washington, D.C. 20554

Rosalind K. Allen, Chief
Commercial Radio Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.
Room 5202
Washington, D.C. 20554

Gerald P. Vaughan, Deputy Chief
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.
Room 5002
Washington, D.C. 20554

Martin D. Liebman, Engineer
Policy Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.
Room 5202
Washington, D.C. 20554

Bruce A. Franca, Deputy Chief Engineer
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W.
Room 7002A
Washington, D.C. 20554

Richard M. Smith, Chief
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W.
Room 7002
Washington, D.C. 20554

Michael J. Marcus
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W.
Room 7102
Washington, D.C. 20554

Richard B. Engleman, Chief
Technical Standards Branch
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W.
Room 7122B
Washington, D.C. 20554

David E. Hilliard, Esquire
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, D.C. 20006

Kathleen Abernathy, Esquire
AirTouch Communications
1818 N Street, N.W.
Washington, D.C. 20036

Henry M. Rivera, Esquire
Larry S. Solomon, Esquire
Ginsburg, Feldman & Bress
1250 Connecticut Avenue, N.W.
Washington, D.C. 20036

Henry Goldberg, Esquire
Henrietta Wright, Esquire
Goldberg & Spector
1229 19th Street, N.W.
Washington, D.C. 20036

John J. McDonnell, Esquire
Reed Smith Shaw & McClay
1200 18th Street, N.W.
Washington, D.C. 20036-2506

George Lyon, Esquire
Lukas, McGowan, Nace & Gutierrez
1111 19th Street, N.W.
Suite 1200
Washington, D.C. 20036

Ruth E. McGovern